

A MISIDENTIFIED LOWER CALIFORNIAN SNAIL

BY H. A. PILSBRY

MANGELIA FREDBAKERI, new species. Pl. 11, fig. 11. San Hippolite Point, Lower California, collected by Henry Hemphill. Type and paratype: 46059 ANSP.; others 113849.

The shell is solid, fusiform, white with brown spots on part of the axial ribs above the periphery and on the basal slope, where they more or less coalesce into spiral bands; wanting in the peripheral region. First two whorls smooth;¹ two spirals then appear, and on the third whorl three spiral cords and weak axial ribs. The last whorl has ten rounded axial ribs about equal to their intervals and 11 or 12 strong spiral cords, of which five are above the periphery. On the face of the penult whorl are four cords. The oblong aperture is slightly narrowed at the anterior end, and has a distinct sinus at the upper end of the outer lip, which is very little retracted there. Anterior to the sinus the outer lip has two low tubercles. The slightly sinuous inner margin of the aperture is plain. Length 4.5 mm., diam. 1.9 mm.

This species has been known in collections as *Pleurotoma* or *Clathurella lineolata* Reeve. It is presumably the "*Mangelia lineolata* Reeve" of Bull. 112, U. S. Nat. Mus., p. 82 (exclusive of reference), but so far as I know our shell has never been described. Mr. le Brocton Tomlin, who kindly compared specimens for me with the type of *P. lineolata* in the British Museum, writes as follows: "Your Lower Californian turrid is not the least like *Pleurotoma lineolata* Reeve. I found the type (ex coll. Gray) without any difficulty. It is an elongate, narrow shell with longish, narrow aperture and somewhat obscurely banded, altogether of a usual palaearctic type of *Mangelia*. I have but little doubt that it is identical with *M. multilineolata* (Desh.) of the Mediterranean."

The generic reference of our Lower Californian snail is

¹ Described from a young paratype; all specimens are somewhat worn, and in the type and other adult shells one or more whorls are lacking.

provisional. It is one of those forms with both columbellid and turrid shell characters, but temporarily referred to the genus *Mangelia* of authors. Named for an old friend, the author of valuable papers on the Lower Californian fauna.

THE GENUS ARMSIA

BY C. MONTAGUE COOKE, JR.

ARMSIA Pilsbry, 1911 (Manual of Conchology 21, p. 132, type *Pterodiscus petasus* Ancey), a monotypic genus, was placed by Pilsbry after *Planamastra* with the following note: "While evidently related to *Planamastra*, *Armsia* has been diversely differentiated, and probably represents a parallel phylum derived from the same amastrine stock before the spire had become flat."

Armsia petasus is to be considered a rare shell, since during the last twenty-nine years material has come into the Museum's collection from only eighteen colonies, eight of which were from the small valley of Pukaloa. Most of this material, which is limited to the Waianae Mountain Range, was collected either by Spalding or Cooke. Additional material has come from Tha anum, Meinecke, and Oswald. The large majority of the specimens were found "dead".

None of the Museum's specimens were collected south of the Pohakea Pass. The Museum has specimens from Kanehoa, Popouwela, Pukaloa, and Haleauau on the eastern side of the range, Mokuleia on the northern side, and Makaha and Waianae valleys on the western side.

From the much more abundant material at my disposal than Dr. Pilsbry had, I have reached somewhat different conclusions as to the position of this genus.

The embryonic whorls, as mentioned by Pilsbry, are distinct from those of *Pterodiscus* and *Planamastra*. Comparison with embryos of other Amastridae shows that they are unlike the typical flattened embryos of any Amastrini, but are almost identical with the embryos of the species of *Leptachatina* placed in the subgenus *Thaanumia*.¹

¹ Manual of Conchology, 21, p. 82, 1911.